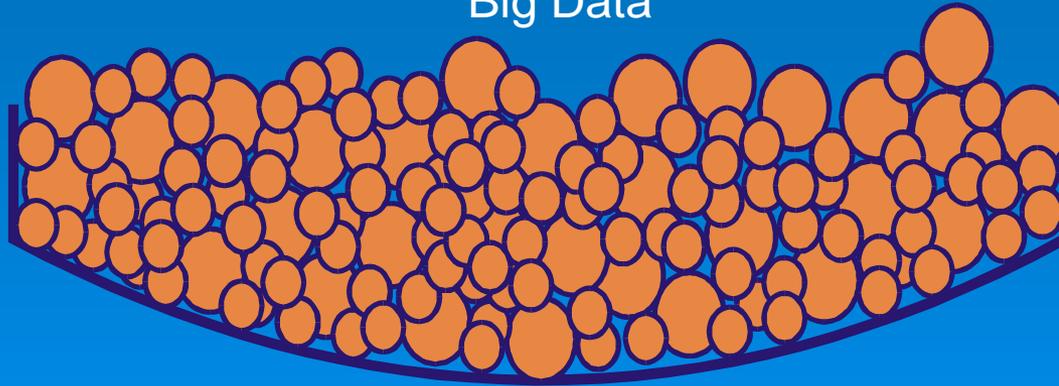


FINDING BUSINESS VALUE IN BIG DATA

A presentation by
W H Inmon

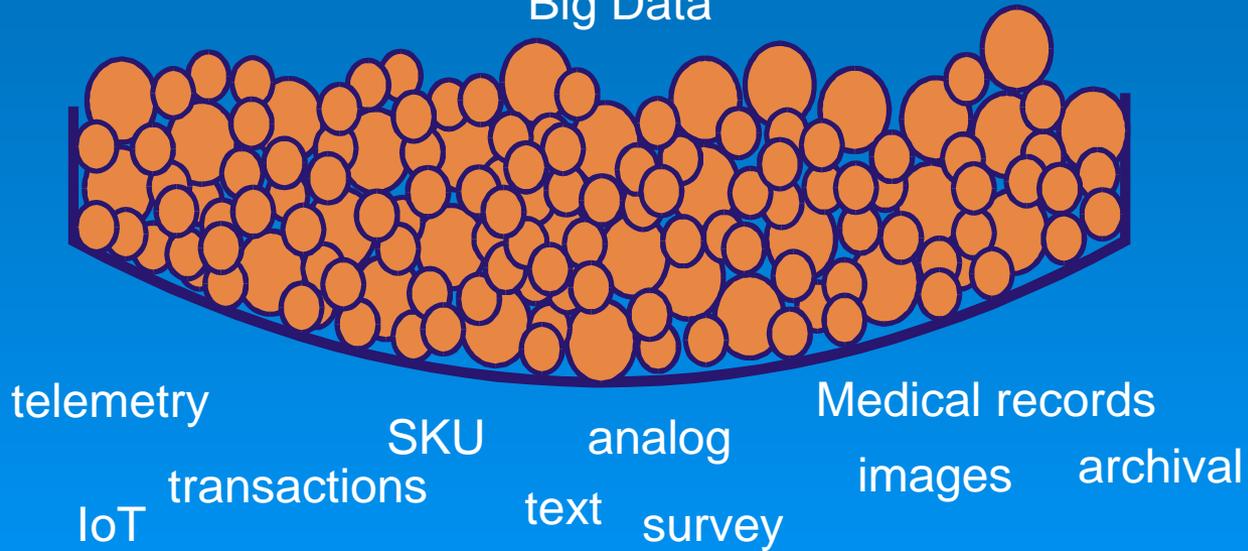


Big Data



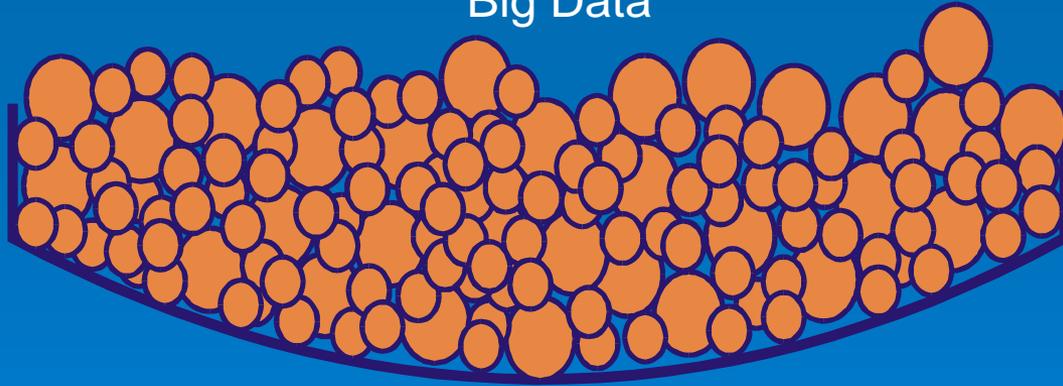
There are lots of kinds of Big Data

Big Data



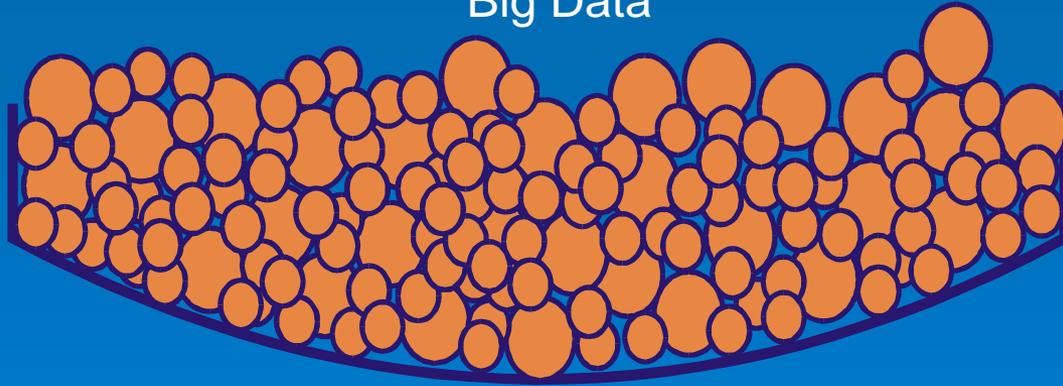
A sampling of some of the kinds of Big Data

Big Data



For many companies, the promise of business value hasn't been achieved by Big Data

Big Data

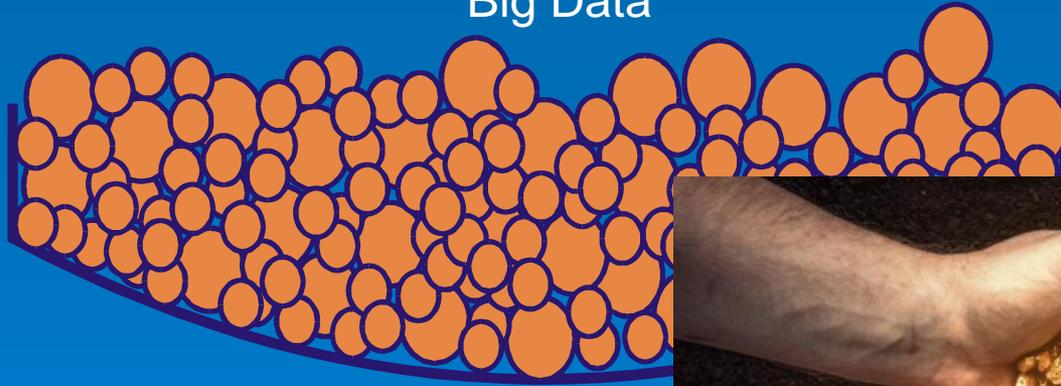


It's sort of like an old song -

Johnny Lee – Looking for Love
In all the Wrong Places

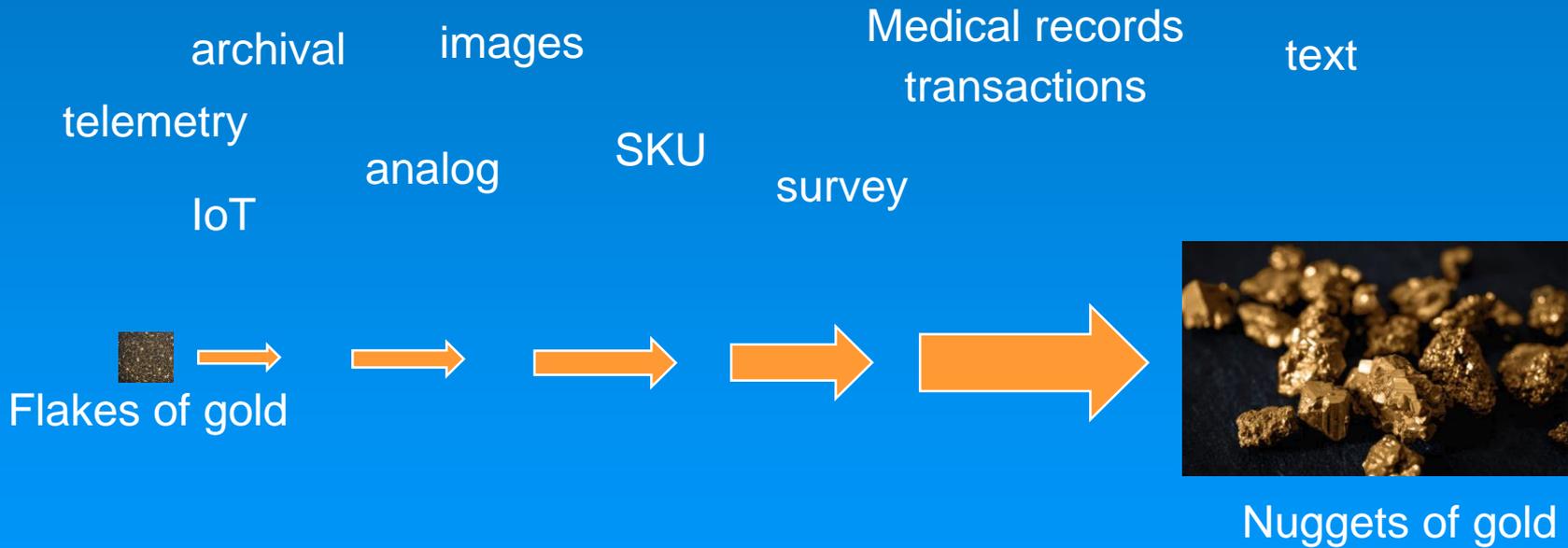
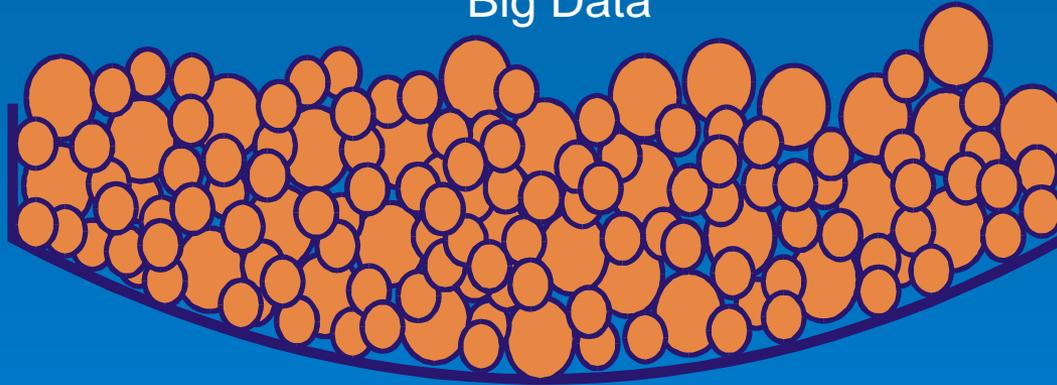
(From Urban Cowboy)

Big Data



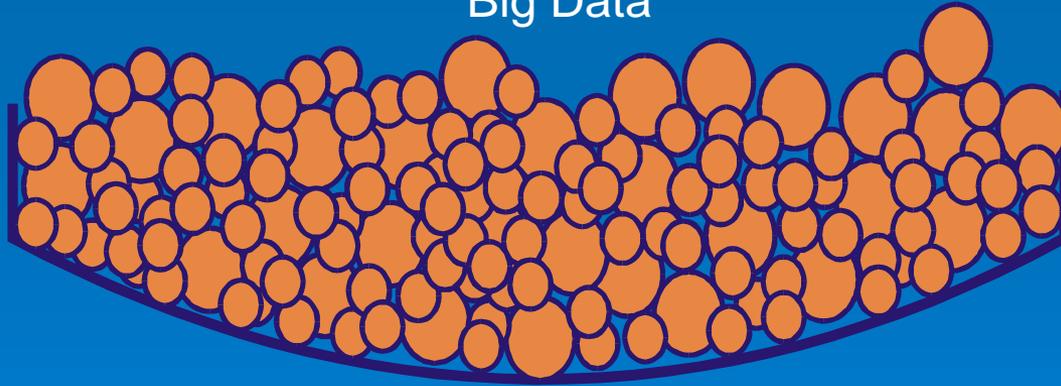
There is a lot of gold in Big Data if you just know where to find it.....

Big Data



The spectrum of where the gold is

Big Data



archival images Medical records text
telemetry transactions
IoT analog SKU survey



There just isn't that much gold to be found



So where's all the gold?



Most of the gold is in the form of text.....

Hearing the voice of the customer

increase revenue

increase customer loyalty

enhance the customer experience



Call center

Most corporations throw the call center data away or do nothing with it – that is really dumb

Call center - text



We get 4,000 calls a day that last for 4.5 minutes....

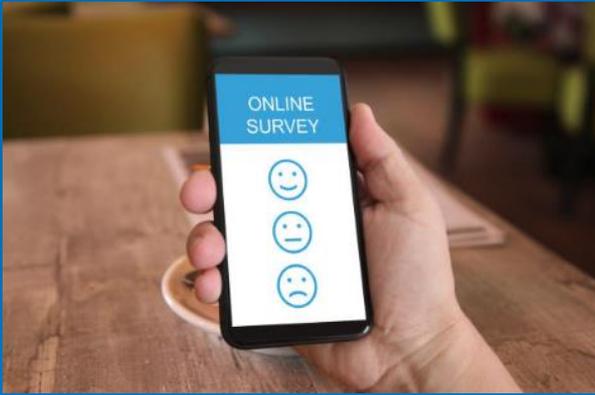
Does this really tell you what your customer is saying?





Lots of companies receive customer feedback then throw it away – that is really stupid

Customer feedback - text



We get 45,000 comments a month. Do you expect us to handle that much data?

If you want to stay in business.....





The Internet is full of really valuable customer insight – most companies don't even know it or never even look at it

Internet - text





They might be saying bad things about our company or our products on the Internet.....

And listening to your customer – however painful that might be – might be the best thing ever that has happened to your company...



The comments section of surveys is full of insight. Most people ignore the comments – this is really dumb

Comments - text



The comments section of surveys is where all the really Important information is.....



Emails can contain valuable insight. Most people archive emails and never look at them again, once viewed

Emails - text



Everybody has contracts, but nobody knows what is in the contracts.
This is not only dumb but dangerous -

Contracts - text





But we have never had a data base with all of our contract information in it that we can analyze

And the Titanic was merrily steaming along until it hit the iceberg, too.....

Corporate textual scoreboard

	Yes	No
Listen to your call center?	<input type="checkbox"/>	<input type="checkbox"/>
Listen to the Internet?	<input type="checkbox"/>	<input type="checkbox"/>
Listen to customer feedback?	<input type="checkbox"/>	<input type="checkbox"/>
Understand your contracts?	<input type="checkbox"/>	<input type="checkbox"/>
Monitor email?	<input type="checkbox"/>	<input type="checkbox"/>
Comments section of surveys?	<input type="checkbox"/>	<input type="checkbox"/>

Like solitaire – if you cheat, what's the point?



Call center
Contracts
Email
Feedback
Internet
Survey comments



Really valuable

The reality.....



Really neglected

WHY?

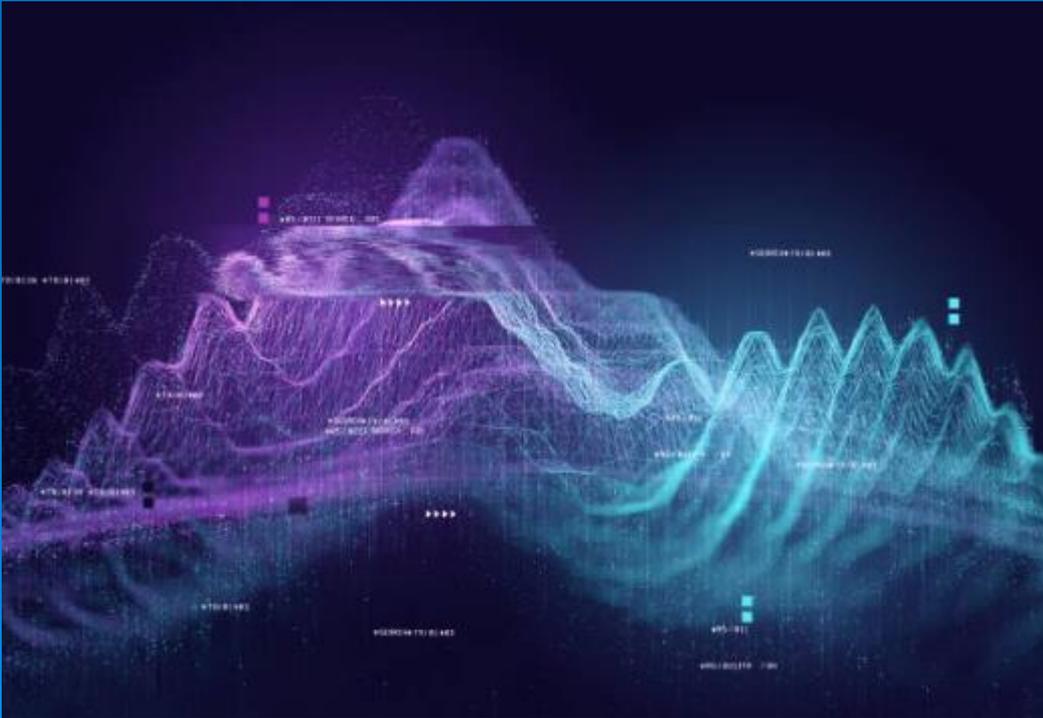




How in the world do I handle text?



text



Trying to make sense of text is VERY COMPLEX!!!

text



stemming

Sound-ex

associative

tagging

proximity

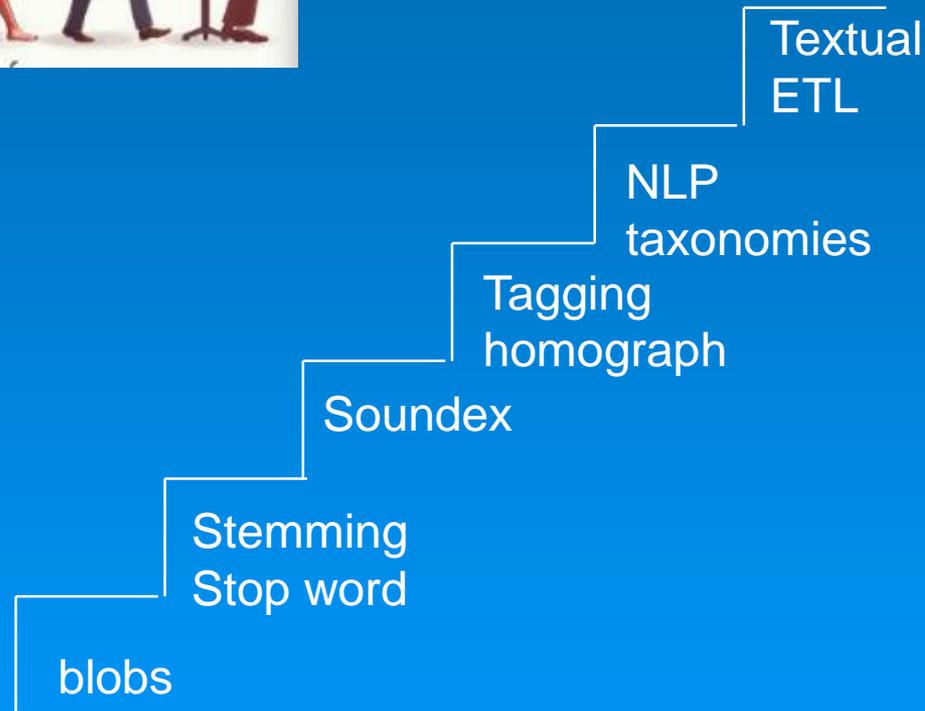
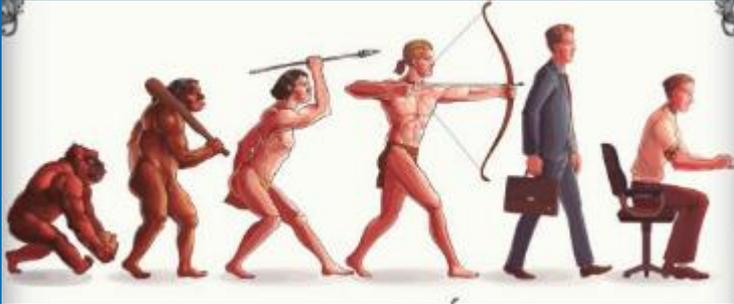
NLP

blob

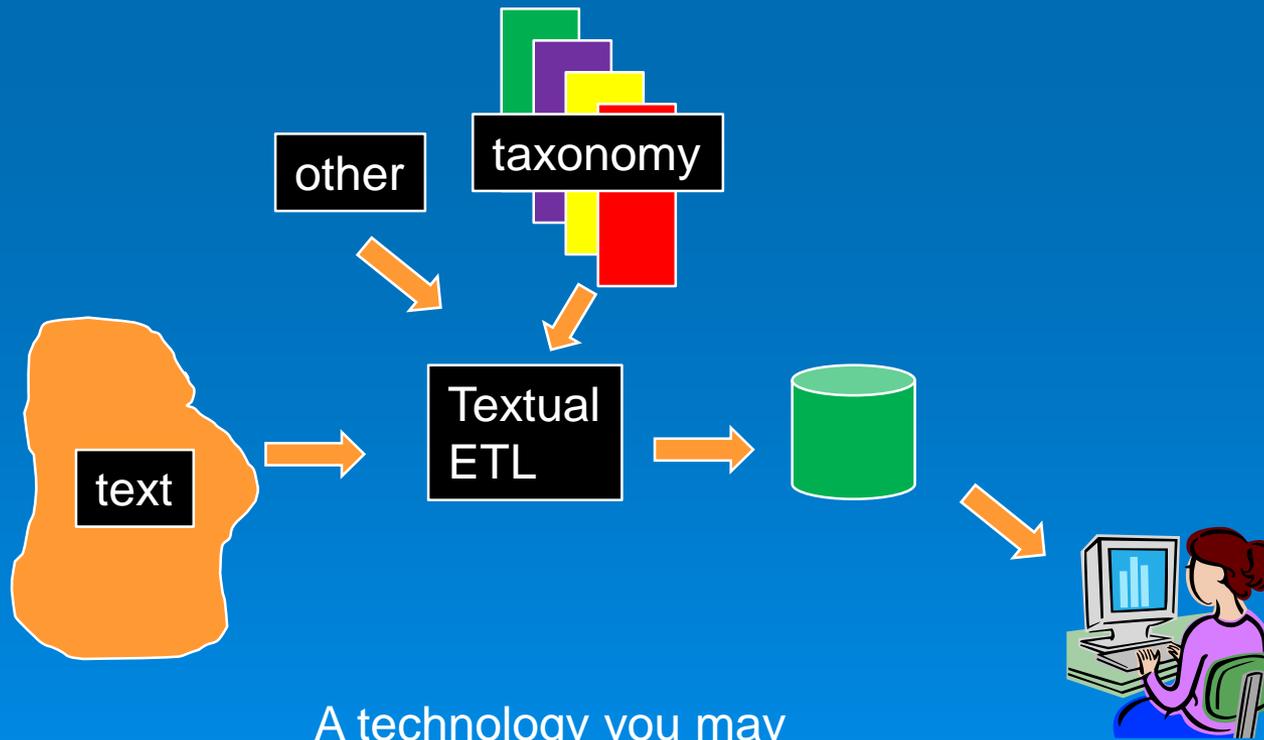
Stop word

homograph

Early attempts to deal with text have had limited success



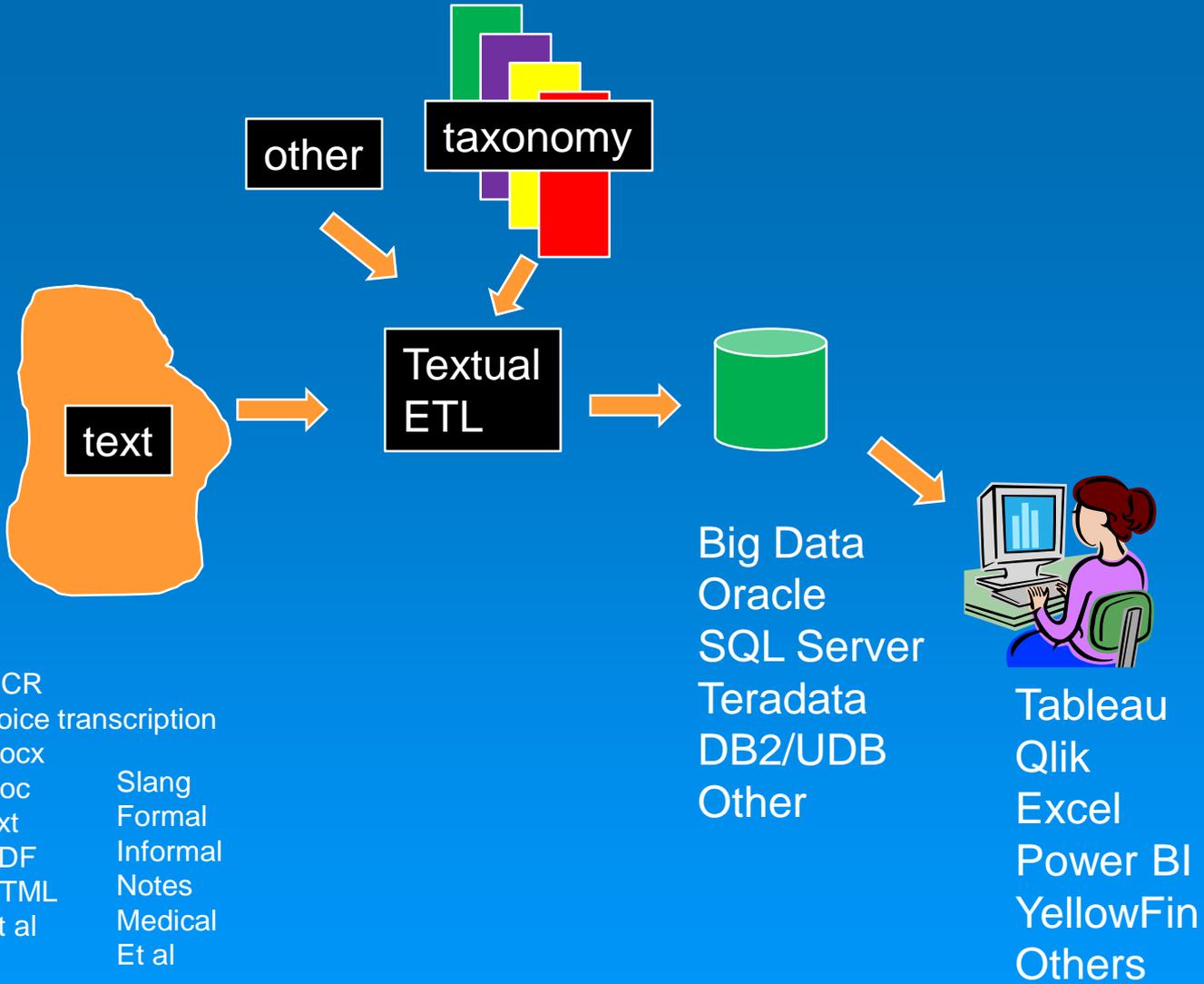
The evolution of handling text in a data base system

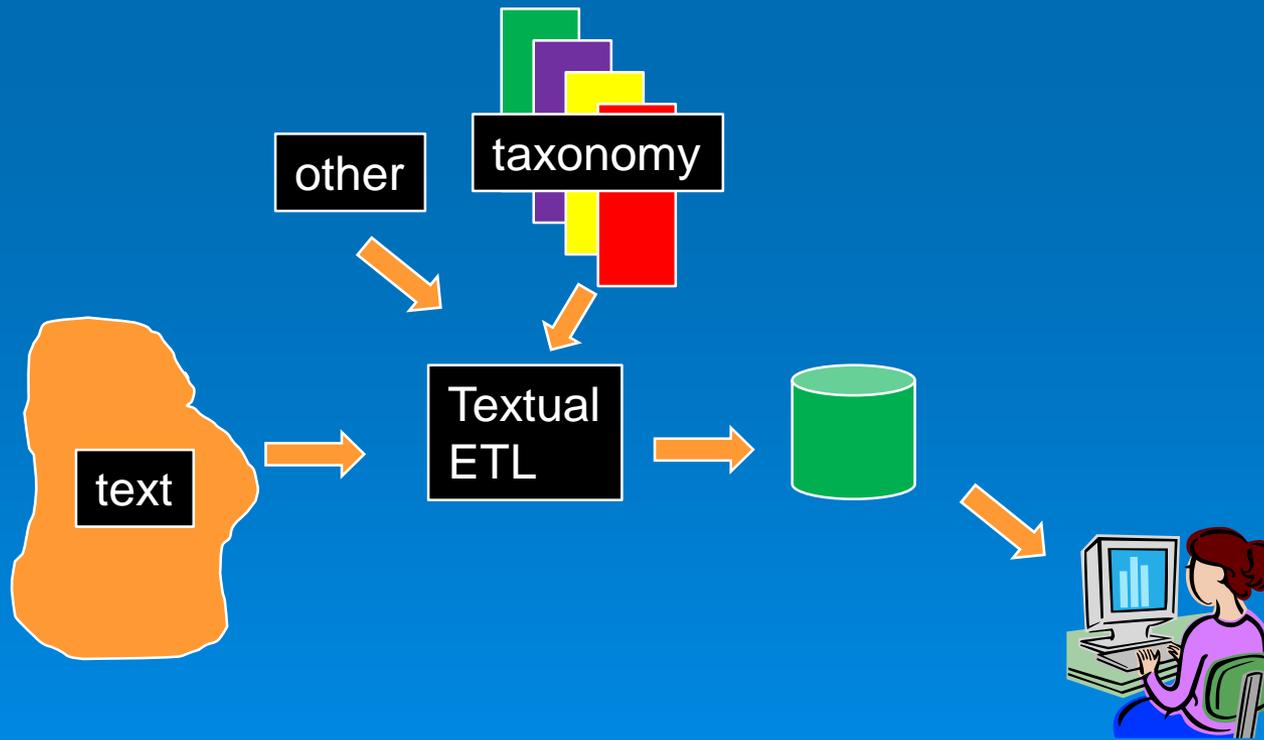


A technology you may not have heard of

Textual ETL – turning text into a standard data base

Once the standard data base has been built, it can be analyzed....





The difference between NLP and textual ETL

NLP – text

Text ETL – text + context + applications



In order to understand the relationship between Big Data and textual ETL, consider this -

The ocean is full of water....



The Sahara is dry as a bone.



+



=



All we need is water to turn the Sahara into a verdant, green country.....right?



+



=



Wrong! The sea
water is salt
water



Turn into
fresh water



Big Data



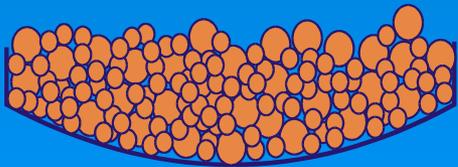
Textual
ETL



Textual analytics



Big Data



Textual
ETL



Textual analytics



Where the gold is -



Applications –

- sentiment analysis using context
- medical record capture
- call center conversation capture, analysis
- contract capture and storage
- inter document analysis (law enforcement, pharmaceutical, insurance)
- Internet voice of the customer
- survey comment capture and analysis
- and many more

